EDUCATION AS A MEANS FOR THE PREVEN-TION OF INSANITY.

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THE word education I use in its most comprehensive meaning: education of body as well as mind from surrounding circumstances and influences as well as from schools and teachers. An education such as this must inevitably be an important factor among the causes of or means for the prevention of insanity, and although the character and physical constitution of an individual cannot be changed by this means, they can certainly be modified, and tendencies morbid or healthy, good or evil, under favorable circumstances may develop out of all proportion to those which have been discouraged and stunted, as a plant is vigorous under the fostering influences of sun and moisture, and is sickly and dies when deprived of them.

"Man's nature runs either to herbs or weeds; therefore let him seasonably water the one and destroy the other.—Bacon.

First of all, any system of education which hinders or neglects health and normal physical development, is radically wrong, for the mutual dependence of the mental proc-

[&]quot;The child is father to the man."

[&]quot;The greatest and most important difficulty of human science is the nurture and education of children."—Montaigne.

ess and physiological function is such that any departure from health in the latter is attended by a disturbance in the former.

The kindergarten schools and object-teaching are steps in the right direction. By these methods the child can learn without bending over a book, straining his eyes, distorting his vertebral column, and cramping his viscera. Children should not be compelled to remain seated or in one position for a long time, but should have frequent changes. Who does not know what an uneasy, restless creature a healthy child is, and yet children are condemned to long hours within doors in vitiated atmospheres; compelled to sit when it would be more healthy and natural for them when not at play to recline.

When an animal, especially a young one, is tired it lies down, and when a child is tired it does the same if allowed, or at least lounges, and the seats and desks of a school-room are not convenient for this.

Of course it is necessary to have some discipline in a school, and children should be taught a certain amount of decorum, but constrained positions should not last. Standing, as they often have to do in classes or as a punishment at school, is a most injurious and cruel torture, and sometimes aggravates a tendency to curvature of the spine.

Confining children, who are at the plastic growing age, in hard, stiff seats with unyielding desks in front, is like packing green figs in a box. The effects are analogous if not the same.

It is a pretty well-established fact that myopia or shortsightedness among children and young people is on the increase both in this country and in Germany, and the cause to which it is ascribed is the vitiated air and leaning forward over a desk to read print which is too fine. The leaning forward produces a congestion of the coats of the eye; and the prolonged endeavor to read fine print necessitates a persistent accommodation of the eyes to short distances. We have as a result the anomaly of a boy or girl with spectacles.

What is true of the eyes is true of other organs. The prolonged application to the task causes hyperæmia of the brain, and the leaning forward, especially when there is any constriction about the neck, interferes with the return of venous blood from the head and brain, and we have a venous stasis, both producing trophic changes if continued. The child may have headaches, night terrors, and possibly hallucinations, and even insanity.

Constipation and indigestion produced by sedentary habits aggravate all this. Too much indoor inactivity in an atmosphere artificially heated, renders the child sensitive to cold and sudden changes, so that he is more liable to be made sick by them.

Again, a prolonged sitting posture with the constipation which may be induced brings on an unnatural heat and congestion of the genital organs, with a corresponding irritability and excitability of those parts, paving the way for future vices and their consequences.

The following is quoted from an editorial in the Boston Medical & Surgical Fournal, vol. cv, No 17.

During the past year 2,074 persons died in the State of Massachusetts over five years of age and up to fifteen, or during school years. In the next fifteen years 2,113 died of pulmonary consumption, out of a total of 5,494 for all ages,—a disease the chief causes of which are innutrition and rebreathing over and over again air which has been vitiated, or, in other words, taking into the lungs what has been very properly called the sewage of the atmosphere. There can be no question that our public schools propagate contagious diseases to a certain extent among the very young, and that their insufficient ventilation or bad sanitary condition often deteriorates the constitution to the point of estab-

lishing diseases which sometimes produce death, sometimes a lasting invalidism, making the individuals wretched, and sometimes simply enfeebled health, which imparts weakened constitutions to children and children's children.

In this editorial it goes on to speak of the medical inspection of schools which began in Brussels in 1874:

By the Bureau of Public Health established, five physicians were delegated to the sole work of medical inspection of schools. They give their attention (1) to faults in construction, heating, ventilating, size of class-rooms, seats, desks, windows, etc.; (2) to the temperature and daily condition of the air, and all the causes tending to vitiate it; (3) to all the circumstances affecting the health of the well child: gymnastics, care of eyes, ears, teeth, skin, body, length of lessons, time of study, light, heat, ventilation, books, swimming lessons, instructive excursions, immediate closing of the schools when the temperature exceeds 82° Fahrenheit. accurate anthropometric records as means of constantly learning the conditions as to health of all pupils, and investigations into the best methods of intellectual development; (4) to rigid regulations regarding infectious diseases, including vaccination, and revaccination, and to careful directions for the training of children below the normal standard of health.

The result has been that no one of the infectious diseases has reached the height of an epidemic in Brussels since the establishment of their inspection of schools, although other cities of Belgium and Europe generally have suffered severely; that the general health of the pupils has improved; that the scholars have much more nearly than before that training which is suited to them individually; and that the public charitable and penal institutions are thought to be less resorted to * * *

It goes on to say:

The New York State Board has commenced a partial medical inspection of some of their schools, but that "no board or municipality has yet undertaken such an important step in Massachusetts."

In the New York Medical Record, Nov. 12, 1881 (vol. xx, No. 20) there is an editorial entitled "The Dangers in the American School System," in which it is said:

Some undoubted progress in matters of school hygiene can now be recorded. The subject is being practically studied in Massachusetts, Wisconsin, Ohio, Maryland, and elsewhere. In some of those States the investigations are in the hands of boards of health; in other cases work has been done only by local physicians, under the direction of the school authorities. It is in the Western States that some of the best work has been done in this direction. The Wisconsin Board of Health has, in particular, published some excellent papers on the subject. In its last report there is an article by Prof. T. W. Chittenden, which enumerates very completely the ills that the growing boy or girl may be subiected to at school.

Among the defects of the American school system reviewed in this editorial, there are, in addition to what I have already mentioned: crowded school-rooms, lack of supervision over the play-ground, lack of care to prevent deafness, irregularity in meals, the excitement and worry of examinations, the struggles for high marks, etc.

It goes on to say:

We have recently received from Dr. L. B. Tuckerman, of Cleveland, O., the results of some investigations. * * * He writes that, during the last school year, of the eight hundred pupils in the Cleveland High School nearly twenty-five per cent. of the girls and eighteen per cent, of the boys withdrew from one cause or another. Investigations were authorized in consequence, and personal inquiries were made by a physician. It was found that seventy-five per cent. of the girls who had left had done so wholly or in part on account of ill health, were in poor health while in school, and thirty-three per cent. of those who left were compelled to do so on account of physical troubles. The Cleveland High School is about the same in character as other city high schools throughout the country. Further inquiries were then made into the health of the scholars as well as of graduates. A very interesting fact was developed in regard to the relation of ill-health to the number of hours spent in study outside of school. It was shown, in the first place, that the girls studied, either from necessity or from choice, more hours out of school than the boys did.

Another series of investigations showed that ill-health increased in inverse proportion to the amount of recreation or social enjoyment indulged in, * * * etc.

The following are Dr. Tuckerman's statistics. He says:

The most important fact was the relation of ill-health to the number of hours spent in study outside of school, and that it takes a girl on the average longer to do the same amount of mental work, thus dividing them into four classes: those that study less than two hours at home; those that study two hours or less than four; four hours and less than six; six and over. We have:

				 Hours 0-2	Hours 2—4	Hours 4—6	Hours 6
Boys, per cent. Girls, "	· ·	•		 25 8	65 47	5 38	3 6

The number of boys was too small to base any definite conclusions upon, but with the girls, 186 in number, the facts are as follows:

	Hours	Hours	Hours	Hours
	0-2	2-4	46	6
Health poor while at school, per cent	29	70	93	100
" very poor " "	14	40	66	100
Appetite deranged "	7	44	47	69
Sleep deranged "	7	18	37	69
Troubled with headache "	22	62	81	100
" back- or sideache, per cent	14	34	57	45
" weak eyes "	29	39	36	42
Eyes failed since the pupil entered the High) 1			1
School, per cent	14	13	18	17
No menstrual symptoms were known, per cent.	5	40	31	9
Menses same while at school, per cent	80	50	19	67
" deranged " "	20	50	8í	33
" frequent or profuse while at school,		"	ĺ	"
per cent	20	28	26	11
Menses scanty, irregular, painful, per cent	_	35	71	33
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In the Boston Medical and Surgical Journal of Nov. 24th, vol. cv, No. 21, Dr. Tuckerman's statistics have since been published more complete, with tables and diagrams. In addition to the symptoms given above, "nervous trouble"

was mentioned, which may mean any thing from a slight neuralgia and nervousness to serious nervous and mental disease.

Cases where the menses were both frequent or profuse or painful, were tallied simultaneously in each class, hence the apparent discrepancy in the percentages. "The gain in health as the pupils indulge more freely in social relaxation is correspondingly marked. The parents of seventy-six of the one hundred and eighty-six girls attributed their trouble, in part, to stair-climbing. The irregularity of meals necessitated by the one-session system, the worry about rank and examinations, were assigned as causes by others."

These statistics of Dr. Tuckerman's show conclusively that in the present school system we have many of the causes of insanity, both predisposing and exciting: general health injured, headache, deranged sleep and appetite, disordered menstruation, neuralgias, and other nervous affections, which merge insensibly into brain or mental disease. What more favorable conditions could there be for the promotion and increase of insanity?

Under such conditions as these, the boy, if ambitious, by the time he is ready to enter college, may be a "foot in the grave young man," with cramped chest, round shoulders, weak and short-sighted eyes, and a brain and nervous system ill-nourished and weakened from loss of sleep, which he should have had when growing. The girl may become a sickly, hysterical, neuralgic invalid, neither ornamental nor useful. Both are candidates for a lunatic asylum.

At this point the girl's education generally is considered completed, so far as schools are concerned. After entering college the young man's life is changed very much. He is only confined in the college buildings while at recitation, and studies his lessons in his room, where he can place himself in as easy a position as he chooses, and for the first time

during study hours has entire freedom to put his feet as high as his head; and what, with this new liberty and the athletic sports, with perhaps a gymnasium such as Harvard's, he may, in spite of his former injurious training, become a man instead of a mummy.

Now, why should not something of this sort be substituted for the present system of school education when the child has passed the kindergarten age. Let the boy or girl have hours for recitation and explanation at school, but let them study at home, out-of-doors, anywhere they can, but don't crowd them beyond their capacity for learning. Arouse their interest, if possible, but don't make them slaves to their tasks; fastened to their chairs and desks like galley-slaves to their oars. Leave plenty of time for exercise and recreation, even if they do not get along as quickly in their studies. Nothing was shown more conclusively by Dr. Tuckerman's statistics than that different standards must be applied to different individuals. Some are slower to learn than others, and there is great difference in the mental capacity of school-children. Often it would be well to hold back the precocious ones.

In the first place, establish a medical inspection of schools similar to and as thorough as that of Brussels, and the needed refórms will follow in time. In this we have a practical remedy, for then we can know just what changes are necessary.

Montaigne says: "Our very exercises and recreations—running, wrestling, music, dancing, hunting, riding, and fencing—will prove to be a good part of our study. I would have his outward behavior and mien, and the disposition of his limbs, formed at the same time with his mind. It is not a soul, it is not a body that we are training up; it is a man, and we ought not to divide him into two parts."

By training the muscles to the performance of precise and delicate movements, and the senses to capability for accurate perception, as in the fine and mechanical arts, the intelligence and powers of observation are increased. In fact this has been found to be the first step in the education of idiots. For a complete enunciation of these principles the reader is referred to the articles entitled "The Psycho-Physiological Training of an Idiotic Hand," in the Archives of Medicine, Oct., 1879, and the "Psycho-Physiological Training of an Idiotic Eye," in the Archives of Medicine, Dec., 1880, by the late Edward Seguin, M.D.

But "art is long and our life is short." We must economize time, and we cannot expect the child to excel in all things, so that there must be a selection of books and of studies, and, with regard to physical training, all must be done in moderation and within the limits of endurance and vitality. Athletic sports must not be carried to excess, or vitality will suffer. Moderate natural exercise increases vitality and facilitates the nutritive process and physiological functions.

It is beyond the scope of this paper to enter into any detailed directions for the physical training of children, and for the hygiene of the nursery or of the later surroundings of the youth and maiden the reader is referred to works on those subjects. Here only a few general principles will be stated.

Good and sufficient food is very essential for the production of a sound mind in a sound body. Cleanliness, which is next to godliness, is also. A tepid or cool sponge bath every day, with a brisk rubbing down afterward, is the best for frequent use. This may be done by another person so as not to exhaust a delicate child; and in the winter the room should be warm, and, if possible, the baths given in

the middle of the day, when vitality is greatest. Warm baths occasionally, if not continued too long, are useful, but are apt to be enervating.

Clothing sufficiently warm in winter, but not confining, is necessary to prevent exposure to cold; and here I may say, that the way to enable children to bear cold and dampness or excessive heat, is not to expose them to the vicissitudes of the weather with little protection, with the false impression that they are hardened in this way, but by nourishing their bodies so that they may have good flesh and blood, and an abundant store of vitality to draw upon, and by protecting them from depressing agencies, such as extreme heat and cold. By protection from cold, I do not mean so many wraps as to cause the victim to break out into a perspiration. Scarfs about the neck had better not be worn at all, and fur hats are apt to be so warm as to cause perspiration of the scalp, and render the head more sensitive to cold. A light covering for the head is all-sufficient, and if every boy wore nothing else, we should see fewer bald heads. The feet and ankles should be protected in cold or damp weather, and kept moderately warm and dry. The wrists, also, and the thorax and abdomen should be protected. The external genital organs should be kept cool, and clothing about those parts should be light.

In summer, at mid-day children should be kept away from the direct rays of the sun, and not allowed to get overheated. By all this care we may be able to ward off colds, sun-strokes, diarrhæas, etc., but should colds come in spite of us, they must not be neglected and allowed to run their course, but should be treated immediately and by appropriate means, and perhaps by so doing an inflammation of the middle ear, or a bronchitis or phthisis, may be prevented. Diarrhæas should be treated, and, in short, all diseases of childhood or youth should be taken in time, as

when allowed to go on they may become more serious and lower the vitality very much.

It is a popular superstition that children are better to have the children's diseases, such as measles, whooping-cough, scarlet fever, and be done with them, when on the contrary it would be better not to have them at all, or to wait until older and stronger. Avoid them as you would the small-pox, and quarantine the cases that exist; and here we see the necessity of a medical inspection of schools. In Brussels, "no one of the infectious diseases has reached the height of an epidemic since the establishment of their inspection of schools."

With girls care must be taken to promote and continue normal and regular menstruation, and any thing which causes derangement of this function must be discontinued, and suppression of the menses must be guarded against, as these disorders are not infrequently the starting-point for mental disease as well as other ills. Constipation should be guarded against, also; in short, all the functions of the body should be kept in healthy regular action if possible.

Enough has been said of late by others with regard to drainage with reference to public health, so that it is not necessary to speak of it here. Malarial poisoning should be avoided if possible, and no one needs to be warned against the effects of diphtheria.

Both malaria and diphtheria are apt to be followed by nervous disease.

Perhaps enough has been said concerning physical care and training, and we will now turn our attention to the development of the mind.

First as to mental training at home and selection of studies and books.

In many cases a child is much better to be kept from school, especially where the parents, by their example and conversation, are a means of education, for as a child is impressible and imitative to a wonderful degree, and oftentimes very observant, its manners and language become the same as its associates. In school ungrammatical expression, vulgarisms, and wickedness are rapidly acquired from other children, and it is hard to eradicate the impressions made at this period. I can do no better here than to quote G. H. Lewes. "One thing, however, he (Goethe) did learn at school, and that was disgust at schools. The boy carefully trained at home, morally as well as physically, had to mingle with school-boys who were, what most school-boys are, dirty, rebellious, cruel, low in their tastes and habits."

The child who inherits a strong moral sense and that stability of character which is to enable him in time to become a social being, and to mould his surrounding circumstances for his own and his fellow-creatures' ultimate good, will come through this ordeal with only scars upon his mental and moral faculties, and may be benefited by the battle, as it will give him greater self-reliance, and there is the stimulus of competition, too; but even here the scars and stains remain, verifying the saying that he who touches pitch shall be defiled.

With a child who is not thus fortunately born, and has some slight immoral tendency, or has inherited a too pliable character, an emotional and passionate nature without corresponding self-control, or the insane temperament itself, to which such a nature leads, the wound may be irreparable, and in some moment of weakness may be fatal to the preservation of a moral sense and self-control.

Parents who feel their incapacity to decide whether 't is better for their children to stay at home or go to school, should submit the question to some person in whose judgment they have confidence, for it may be that the home influence is not the best that can be had. If every boy or girl were surrounded by such influences as Goethe's childhood was, we would not need to hesitate.

The mother of Goethe "employed her faculty of storytelling to his and her own delight. Air, fire, earth, and water I represented under the form of princesses, and to all natural phenomena I gave a meaning, in which I almost believed more fervently than my little hearers. As we thought of paths which led from star to star, and that we should one day inhabit the stars, and thought of the great spirits we should meet there, I was as eager for the hours of storytelling as the children themselves; I was quite curious about the future course of my own improvisation, and any invitation which interrupted these evenings was disagree-There I sat, and there Wolfgang held me with his large black eyes; and when the fate of one of his favorites was not according to his fancy, I saw the angry veins swell on his temples, I saw him repress his tears. He often burst in with, 'But, mother, the princess won't marry the nasty tailor, even if he does kill the giant.' And when I made a pause for the night, promising to continue it on the morrow, I was certain that he would in the meantime think it out for himself, and so he often stimulated my imagination. When I turned the story according to his plan, and told him that he had found out the denouement, then he was all fire and flame, and one could see his little heart beating underneath his dress. His grandmother, who made a great pet of him, was the confidante of all his ideas as to how the story would turn out, and as she reported these to me, and I turned the story according to these hints, there was a little diplomatic secrecy between us which we never I had the pleasure of continuing my story to disclosed. the delight and astonishment of my hearers, and Wolfgang saw with glowing eyes the fulfilment of his own conceptions, and listened with enthusiastic applause. What a charming glimpse of mother and son." (Lewes' "Life of Goethe.")

The mother's admirable method of cultivating the inventive activity of the boy, finds its pendant in the father's method of cultivating his receptive faculties. He speaks with less approbation than it deserved of his father's idea of education; probably because late in life he felt keenly the deficiencies of systematic training. But the principle upon which the father proceeded was an excellent one; namely, that of exercising the intellect rather than the memory, etc., etc.

Charles James Fox, of whom Walpole says: "Fox had not the ungraceful hesitation of his father, yet scarce equalled him in subtlety and acuteness; but no man ever excelled him in the closeness of argument, which flowed from him in a torrent of vehemence, as declamation sometimes does from those who want argument"; and whom Burke called "the greatest debater the world ever saw," was made a constant companion of by his father, who used to take him when he went to dine with his brilliant associates. The result was that, with a naturally remarkable memory, he acquired such a vocabulary that he was never at a loss for a word.

Many other such instances could be given to show what home education is capable of, and how natural talents can be cultivated. If a child shows a taste for any particular study, for any art, by all means foster it, as we are not only fostering what may prove to be genius, but at the same time providing for the future happiness of the child—for what greater and more lasting happiness is there than to succeed in the pursuit of a chosen and loved profession or art.

It is rare, however, to find a mother such as Goethe's; and Maudsley (page 101, "Pathology of Mind") says:

"Those who have had much to do with the treatment of insane persons have not failed to note the marked mental peculiarities of their near relations in many instances, and to lament that they oftentimes show themselves more distrustful, more difficult to reason with, more impracticable, than the member of the family who is confessedly insane. In the first place, they have such an intimate radical sympathy of nature with those tendencies of character which have culminated in insanity in them," etc.; and (page 163): "Parents, who, having themselves a weak strain in their nature, have given their children the heritage of a morbid bias of mind, are very apt unwittingly to foster its unhealthy development; they sympathize so essentially with it that they do not perceive its vicious character—if they do not actually admire it-and leave it to grow unchecked by a wise discipline, or perhaps stimulate it by the force of a bad example. 'He is so spoiled,' says the silly mother placidly of her child, as though she was saying something creditable to it, or at any rate that was not very discreditable to her, little thinking of the terrible meaning of the words, and of the awful calamity which a spoiled life may be."

Of course in such cases as these there is little that will or can be done to check morbid or vicious tendencies, but even here there will often be some one or two members of the family who have sufficient discernment and common sense to see what is necessary; and it is not uncommon for the insane themselves to have great anxiety about the welfare of their children and a perfect willingness to abide by the decisions of their trusted friends.

We will assume, however, that the parents are judicious, or that they are at least anxious to teach their children, both by precept and example, that which will smooth their path through life, help them to fight their battles successfully, and make them a pleasure to others as well as to

themselves. In the first place, and very important, it is necessary for parents and the older members of a family to avoid doing themselves what they would not wish the children to do.

Cheerfulness should be cultivated both by the parents and in their children. All repining and melancholy should be discouraged—

"All my griefs to this are jolly,
Naught so damn'd as melancholy,"—

and if not avoided it may become habitual, and when indulged in to an extreme has a very depressing effect on the health and proper functional activity. It would be too much, perhaps, to say that it may merge into that type of insanity called melancholia; but it certainly is true that it is a dangerous and morbid mental habit and predisposes to mental disease. "The most certain sign of wisdom is a continual cheerfulness; her state is like that of things in the regions above the moon, always serene and clear." It is possible to train one's self to look on the bright side by dismissing resolutely all melancholy ideas and directing the attention to something which will suggest a pleasant train of thought. It is true that a temporary melancholy or "fit of the blues" is apt to be a result of physical depression, fatigue, or disordered function; and in such cases it is difficult to overcome it by a mental effort: thus the cause should be sought for and removed, if possible. If the cause is at all obscure, a physician should always be consulted, as it may be that he can relieve by some simple means, and perhaps avert an attack of mania.

Children should be taught self-denial, that they may be the better able to bear misfortunes and disappointments that are to come later in life, and which, if they have not the philosophical spirit and a persistent optimistic habit, may be the exciting cause of their mental ruin. A selfish egoism is one of the peculiar traits of character which is most noticeable in the insane; a constant introspection; their symptoms, their miseries, or their imaginary grandeur, etc., are the all-absorbing themes with many of them.

Egoism often manifests itself, in various degrees, in children as well as adults, in the form of self-consciousness or morbid sensitiveness or pure selfishness; and all these should be combatted as dangerous tendencies and as indications, when marked, of the insane temperament. Self-consciousness can be lessened, if not overcome, by avoiding all conversation and personal remarks about children in their presence, and by awakening their interest in any thing which will cause them to forget themselves in the presence of others. Morbid sensitiveness should be overcome, first, by kind treatment, persistent admonitions, and by discouraging all belief in fancied slights or injuries; and by teaching that, in this respect, "where ignorance is bliss' tis folly to be wise."

They should be taught self-control, to curb their passions and vicious impulses, as these lead to insanity and crime. "If the individual's natural habit of thought be of a suspicious, of a vainly conceited, or of a despairing character, what more in accordance with analogy than that the predominant activity, temporary or habitual, should take on a chronic morbid action, and issue in the production of a delusion? Any great passion in the sound mind notably calls up kindred ideas, which thereupon tend to keep it up; the evil eye of envy, the green eye of jealousy, sees only what feeds the passion, and it is plain that the morbid exaggeration of this natural process must lead in a weakened brain to the production of insane delusions." (Page 205, Maudsley, "Pathology of Mind.")

"Passing from consideration of the general method and aim of true education, I may point out that the sound and strong character which it might be expected to form would be well fortified against some of the most common exciting causes of insanitythose passions, namely, which often make shipwreck of the mental health; for the passions are like the wind, which swells the sail, but sometimes, when it is violent, sinks the ship. To get rid of an overweening conceit of self, by bringing home to the individual true conceptions of his humble relations and subordinate purpose in nature—which I take to be one good use of the overwhelming immensity of the heavens and of the revolving multitudes of stars, -would help to moderate and control the emotional and effective element in his nature, inability to moderate and control which is real slavery; and to do that would be to get rid at one stroke of the so-called moral causes of mental disease. Sorrow for loss of fortune or loss of friends, envies, hatreds, and jealousies, disappointed ambition, the wounds of exaggerated self-love, anxieties, and apprehensions, and similar heart-aches, all of which have their footing in a keen self-feeling, and gain undue activity from the want of a proper development of the rational part of the nature, would not then produce that instability of equilibrium which goes before the overthrow of the mental balance. What hold could disappointed ambition have upon him who soberly weighed at their true value the common aims of worldly ambition, who perceived the degradation to be gone through in order to attain them, who foretasted the bitterness of achieved success when they were attained, and who set before himself definitely as his true aim in life, for which he worked definitely, the highest development of which his intellectual and moral nature was capable?" etc., etc. (Page 159, Maudsley, "Path. Mind.")

The reading of boys and girls should have a careful supervision. Dime novels and such sensational literary trash, or I should say poison, as we see in some of the illustrated papers; the sickly sentimentalism of such magazines as one can buy in every news stall or railroad train, and even find in the houses of intelligent people, should be forbidden fruit; and it would be well if such publications as dime novels with their sanguinary stories, and papers which depend for their livelihood upon their chronicles of crime

and scandal and their immodest illustrations, could be suppressed by law, as obscene literature is.

Many a boy or girl receives an education as much from reading out of school as from the prescribed outline of study, and the midnight oil is burned over tales of villainy and passion, or some vapid story of a hysterical girl and an impossible man who adores her in a ridiculous manner.

Boys and girls should know nothing of love until they are old enough to experience it, and should not have their minds prepared by their reading for elopements and foolish marriages and a defiance of good advice from their fathers, whom they have invested with the attributes of the traditional stern and tyrannical parent. Instead of all this morbid excitement of the emotional nature they should be induced to read what would be a benefit and a delighful mental resource in after life,—the tales of Grecian mythology, the poems of Homer and other classics, the classical literature of mediæval and modern times, history, lives of great men, popularized science, tales of adventure if you please, but such as would afford them knowledge of the world, its creatures, and natural phenomena, as, for instance, Robinson Crusoe, Jules Verne, etc.

If children can memorize nursery rhymes and such poems as the "Ride of St. Nicholas," which I once heard repeated word for word by a boy not out of dresses, why should they not memorize Shakespeare, Spenser, Bryant, Tennyson, Longfellow, or Whittier, and have something to think of when grown up, alone, and thrown upon their own resources for amusement. The memory can be cultivated to a certain extent in this way without injury. Of course there must be care and moderation, especially with nervous and precocious children, as in all else.

The excitement of children by religious revivals should be avoided, and in fact they are pernicious at any age. They excite the emotions dangerously and are positively injurious. Not infrequently they are the exciting causes of insanity. Children should never be frightened by hobgoblin stories, by the terrors of darkness, or with the penalty of eternal punishment. They should rather be taught to fear nothing that is really harmless, even if it be a snake. Cases have probably occurred in which a hallucination has been excited by threatening a nervous child with a terrible black man, or with foolish stories of the devil and ghosts.

Children are sometimes very precocious sexually, and need careful watching to guard against any excitement or perversion of the sexual instinct, or any source of genital irritation, and when the last is present it should be removed if possible. It has been pretty well established that genital and even preputial irritation may alone cause reflex nervous disturbance and perhaps paralysis, and it is probably one of the chief factors in the sexual precocity of some children. It may be that circumcision would be beneficial in these cases. Enough has been said by others of the necessity for watchfulness when boys and girls become older. Suffice it to say that it is of prime importance for the prevention of insanity.

Stimulants and narcotics should never be taken by children, except by the advice of the physician. Tea and coffee are injurious to their health. Boys should be told that the use of tobacco is injurious to their health, and a nerve poison, and that its use will interfere with their growth to well-developed men.

As boys and girls become old enough to understand it, they should be taught to avoid eccentricity and not to defy the requirements of custom without some very excellent reason, as eccentricity approaches, if it does not even cross at times, the border-line of insanity. "If Socrates and Aristippus have transgressed the rules of custom, let

him not imagine that he is licensed to do the same; for it was by great and sovereign virtues that they obtained this privilege." (Montaigne's translation from Cicero, "De Offic.," i, 41.)

Thus far I have not detailed the traits which distinguish the "neuropathic constitution," in which mental and nervous disease is most likely to develop, because I believe that this constitution can be developed by neglect of the laws of health, faulty education, and by the ravages of disease, which might be averted in a child whose mental and physical inheritance is good. But since to be forewarned is to be forearmed, I now insert the following, which is quoted from a paper on the "Prophylaxis of Insanity" by Mary Putnam Jacobi, and is abridged by her from Krafft-Ebing, who, she says, "ranks severe and congenital hysteria with the psychic degenerations, and shows it to be the forerunner of much real insanity. (This statement is not made in regard to acquired hysteria, symptomatic of uterine or other diseases.)"

In neuropathic families the children early manifest a remarkable nervous excitability, with tendency to severe neurotic disorders at physiological crises, as convulsions during dentition, neuralgias at menstruation. The establishment of menstruation is often premature, often preceded and followed by profound chloro-anæmia. The cerebral functions are easily disturbed, slight physical disorders being attended by somnolence, delirium, hallucinations. The nervous system seems to be everywhere hyperæsthetic. Reaction to either pleasing or displeasing impressions is excessive; there are abundant reflex neuralgias, vasomotor irritations. Pallor, blushing, palpitations, præcordial anxiety, are caused by trifling moral excitement or by agents lowering the tone of the vaso-motor nerves, as heat or alcohol.

"The sexual instincts are precocious and often perverted. The establishment of puberty is often the sign for the development of spinal irritation, hysteria, or epilepsy. The psychic characteris-

¹ Archives of Medicine, vol. vi, No. 2.

tics correspond. The disposition is strikingly irritable and touchy; psychic pain arises for trifling cause; at the least occasion the most vivid emotions are excited. The subjects of this temperament alternate rapidly from one extreme to the other; their sympathies and anthipathies are alike intense; their entire life is passed between periods of exaltation and depression, leaving scarcely any room for healthy indifference. On the other hand there is a remarkable inexcitability of ethical feeling. Vanity, egotism, and a jealous suspiciousness are common; and the temper is often violent. The mind is often obviously feeble, with few and monotonous ideas, and sluggish association of them. At other times ideas are readily excited; the imagination is active even to the production of hallucinations; but mental activity is ineffective, because of the rapidity with which it leads to exhaustion. There is no time to complete any thing before the energies flag. The will is equally deceptive in its apparent exuberance and real futility. Its capricious energy and innate weakness is a fit counterpart for the one-sided talent or even whimsical genius which often marks the intelligence."

When such a case presents itself as the above description will apply to, it must require our utmost solicitude and care; and knowing what we have to deal with, our efforts to ward off threatened evils may be successful. For all this care we may have the reward in saving a genius to the world, for Julius Cæsar, Napoleon, Mahomet, Swedenborg, and Joan of Arc, were all of a "neuropathic constitution," or, which is the same thing, the insane temperament. However, only a certain proportion of the insane inherit their disease; and probably there are many cases in which the insane who have married wisely do not transmit their infirmity to their children.1 Dr. Isaac Ray said, in an address to the trustees of the Danville Asylum, in 1869: "From the sad disorder which is to be treated within these walls, no one has any privilege of exemption. No accident of fortune or birth, no measure of strength, no exercise of prudence may be able to save you from the fate of others,

¹ See Folsom, "Diseases of Mind," page 109.

once as little likely to meet it as you. Or, if you escape personally, the stroke may fall on child, parent, or neighbor, with far more sorrow than if it fell on yourself."

Dr. Kirkbride says: "Insanity is a disorder of the brain, to which, under certain contingencies, every one is liable." (Rep. for 1876.)

"Hagen, too, after exhaustive researches extending over a period of twenty-five years, has concluded that the influence of heredity, although considerable, is still much less than has usually been supposed." (Folsom, "Diseases of Mind.")

"Some of our most experienced and best-informed alienists consider the manifold diseases of the mind no more likely to be transmitted to offspring than Bright's disease and pulmonary consumption." (Folsom, "Diseases of Mind.")

From these statements it may be seen that it is necessary to be careful with all children, as well as those who seem peculiarily liable to suffer from mental or nervous disease; and it would seem also that those who have had the most experience with insanity, and therefore the most likely to have a correct opinion concerning it, think that the insane temperament or constitution most liable to mental and allied diseases can be and is often acquired, so that as we obtain a better knowledge of the causes, we may hope to avert them as easily as we do those of other diseases.